

**LED ILLUMINATOR**

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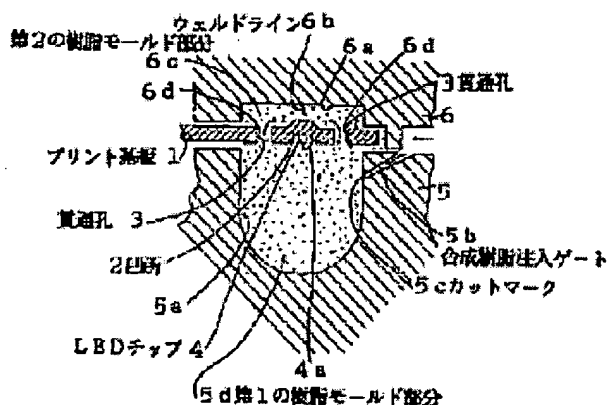
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**Abstract of JP6334223**

**PURPOSE:** To enhance the light take-out efficiency while simplifying the manufacture by mounting a LED chip at a recess made in a printed board.

**CONSTITUTION:** A LED chip 4 is mounted at a recess 2 made in a metal base printed board 1 by contraction so that the inclining surface at the recess 2 functions as a light reflective part.

At least two through holes are made at predetermined positions in the vicinity of the LED chip 4 and a first resin molded part 5d, having lens characteristics on the LED chip mounting face side, is formed integrally with a second resin molded part 6c on the opposite side through the through hole 3. Consequently, a part of the light emitted from the LED chip 4 is reflected on the inclining surface of the recess 2 and the majority of light is led to the front of the recess 2 where it is condensed through a spherically molded resin thus enhancing the total light take-out efficiency significantly.



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